

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE  
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS  
FOLLOWS:**

- 5 1. An apparatus for use in dispensing coin rolls, said apparatus comprising:
- (a) a receptacle to hold the coin rolls in a vertically stacked array;
- (b) a dispensing means, to dispense the coin rolls from a bottom of the receptacle;
- 10 (c) a controller, to control the dispensing means responsive to instructions from a user; and
- (d) a rotating device to prevent bridging;
- wherein, upon receiving instructions from a user to dispense coin rolls, said controller controls said dispensing means so that said coin rolls
- 15 are dispensed from the receptacle.
2. The apparatus according to claim 1, wherein the receptacle is configured to permit gravity to urge the coin rolls towards the dispensing means.
- 20 3. The apparatus according to claim 2, wherein the receptacle includes a guide means to help guide the movement of the vertically stacked array of coin rolls, under the influence of gravity, towards the dispensing means.
- 25 4. The apparatus according to claim 3, wherein the vertically stacked array has a weight, and wherein said guide means supports some of the weight of the vertically stacked array, so that the coin rolls located towards the bottom of the receptacle, and the dispensing means, do not bear the full weight of the vertically stacked array of coin rolls.
- 30 5. The apparatus according to claims 3 or 4, wherein the guide means comprises one or more guide ramps.

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6. The apparatus according to claim 5, wherein the guide ramps are attached to a back wall of the receptacle, said guide ramps and said back wall being sized and shaped to accommodate a coin roll of a particular size.

5 7. The apparatus according to claim 6, wherein the guide ramps are attached to a removable plate that is attachable to the back wall of the receptacle.

SUB 43 8. The apparatus according to claims 6 or 7, further including a front wall hinged to be openable, to facilitate replacement of coin rolls.

10 9. The apparatus according to claim 8, wherein the receptacle is sized and shaped so that the distance between the front wall and the back wall, or between the front wall and the removable plate, closely accommodates the length of the coin roll to be dispensed by the apparatus.

15 10. The apparatus according to claim 1, wherein the dispensing means is a toothed wheel rotated by a motor.

20 11. The apparatus according to claim 10, wherein said motor is a reversible electric motor.

25 12. The apparatus according to claim 10, wherein a slot is defined by adjacent teeth in the toothed wheel, each slot being sized and shaped to hold one coin roll.

30 13. The apparatus according to claim 10, wherein the teeth of the toothed wheel are configured to capture a coin roll urged towards said toothed wheel by gravity.

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14. The apparatus according to claim 1, further including a dispense detector to inform the controller when a coin roll has been dispensed from the receptacle.

5 15. The apparatus according to claim 14, wherein the controller stops said dispensing means when said controller is informed by the dispense detector that at least one coin roll has been dispensed.

10 16. The apparatus according to claim 15, wherein the instructions provided by the user are to dispense coin rolls totalling a particular value, or to dispense one or more coin rolls of different denominations, and wherein the controller, through information provided by the dispense detector, keeps a count of the total value of the coin rolls being dispensed or the number of coin rolls of different denominations being dispensed.

15 17. The apparatus according to claim 16, wherein the controller stops said dispensing means when the total value of the coin rolls dispensed, or the number of coin rolls of different denominations dispensed, reaches the value or number specified in the instructions by the user.

20 18. The apparatus according to claim 1, further including a jam detector to inform the controller whether the dispensing means is jammed or otherwise not operating.

25 19. The apparatus according to claim 18, wherein, upon the controller receiving information from the jam detector that the dispensing means is not operating, and wherein the controller has received instructions from the user to dispense coin rolls, and said coin rolls have not been dispensed, said controller controls the dispensing means so that said dispensing means  
30 performs a re-activation procedure.

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20. The apparatus according to claim 19, wherein said dispensing means has a forward mode in which said dispensing means dispenses coin rolls, and a reverse mode, and said re-activation procedure consists of operating the dispensing means in reverse mode for a predetermined period, and then attempting to operate the dispensing means in forward mode, and then repeating said re-activation procedure for a predetermined maximum number of times, or until the jam detector indicates that the dispensing means is operating in forward mode.

21. The apparatus according to claim 20, wherein the dispensing means includes a reversible electric motor, and wherein said forward mode comprises said reversible electric motor operating in a forward direction, and wherein said reverse mode comprises said reversible electric motor operating in a reverse direction.

22. The apparatus according to claim 1, wherein the controller comprises a computer operating a software control program, and a visual display screen for viewing by the user.

23. The apparatus according to claim 22, wherein the visual display screen is a touchscreen.

24. A change making machine, said machine comprising:

- (a) an apparatus for use in dispensing coin rolls, said coin rolls being stored in a vertically stacked array, said apparatus having a rotating device to prevent bridging of said coin rolls;
- (b) a vault to hold one or more apparatuses; and
- (c) a user interface, to receive instructions from a user, to validate said instructions, and to control the dispensing of coin rolls from the apparatuses;

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wherein, upon receiving instructions from the user to dispense coin rolls, and upon validating said instructions, said user interface controls said apparatuses so that said coin rolls are dispensed from the apparatuses.

25. The change making machine according to claim **24**, wherein the user interface validates the instructions from the user in response to the user providing one or more items from the group consisting of: paper currency, magnetic encoded card, and optically encoded card.

26. The change making machine according to claim **24**, further including a communication interface for communicating coin reserve and machine status information.

27. A coin roll dispensing system, said system comprising:

- (a) one or more change making machines;
- (b) a communication means to communicate coin reserve and machine status information between each change making machine and a designated remote location; and
- (c) a central system controller, positioned at the designated remote location, to receive coin reserve and machine status information carried by the communication means, to analyze said information, and to transmit instructions through the communication means and other means;

wherein, upon receiving coin reserve and machine status information from the communication means, said central controller analyzes said information, and transmits instructions directing available resources to replenish the coin roll reserves of the change making machines in the system, as required, and to repair malfunctioning machines, so that operation of the coin roll dispensing system is efficiently maintained.